



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
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7/11/2012

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**Subject: Comments on the Draft Environmental Impact Statement (DEIS) for  
Tarmac King Road Limestone Mine, Levy County, Florida  
Filed: 05/3/12; CEQ Federal Register: 05/11/12  
CEQ Number: 20120138; ERP Number: COE-E67006-FL**

Dear Sir:

Pursuant to Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the "Draft Environmental Impact Statement (DEIS) for Tarmac King Road Limestone Mine" dated May 2012. EPA understands that this DEIS was developed by the Regulatory Branch of the Jacksonville District, U.S. Army Corps of Engineers (COE), and was prepared in response to an application submitted by Tarmac America LLC (Tarmac) for a U.S. Department of the Army permit under Section 404 of the Clean Water Act (CWA) of 1972 (33 U.S.C. 1251 et seq.) associated with proposed limestone mining activities within southern Levy County in west-central Florida. The site is approximately 80 miles north of Tampa, Florida, and is located in Levy County just west of U.S. Route 19, approximately 5 miles north of the town of Inglis. EPA notes that in preparation of this DEIS, the COE considered public and agency comments received during a 60 day scoping period ending April 26, 2008. EPA also notes that two public scoping meetings were held on March 26 and 27, 2008, in Levy County, Florida, and a summary of scoping comments received is found in Chapter 1 of the DEIS. Also, EPA's Section 404 Project Manager, Mr. Eric Hughes, conducted a site inspection on April 12, 2012 along with the Jacksonville District COE Regulatory Division Project Manager and a representative of the applicant.

The DEIS notes that Tarmac's permit application proposes to mine areas that include wetlands, as well as discharging dredged or fill material into waters of the United States during the mining process. The mined material would provide construction-grade limestone aggregate for Florida road infrastructure and other building activities. The proposed site would be mined over an approximately 100-year period, and Tarmac is proposing to mitigate the adverse impacts of this action by restoring, enhancing, and preserving an adjacent wetland area. The overall Tarmac King Road Limestone Mine project involves two parcels of land totaling about 9,400 acres (15 square miles), 2,700 acres (4 square miles) of which would be mined. The overall mining area is on an approximately 4,800-acre (7.5-square-mile) parcel, and the proposed mitigation area is an

approximately 4,600-acre (7.2-square-mile) parcel. The western portion of the proposed mitigation area adjoins the Waccasassa Bay Preserve State Park.

EPA notes the DEIS appropriately evaluates the existing environmental conditions and potential future impacts associated with the mining of limestone from the proposed Levy County site. We note that, as required under NEPA, the DEIS evaluates the existing socioeconomic conditions and potential future impacts associated with the excavation of limestone from the proposed mine site in Levy County, and fully describes and assesses alternatives to limestone mining at the proposed site. EPA also notes that the DEIS considers sources of limestone outside the Levy County area. The DEIS appropriately quantifies potential mining impacts of “up to 2,069 acres of wetlands and 1,818 acres of uplands over a period of approximately 100 years.” The DEIS states that Tarmac proposes that approximately 4,195 acres of wetlands and 331 acres of uplands in an adjacent area would be restored and/or preserved, and up to 522 acres of wetlands and 329 acres of uplands on the proposed mine parcel would also be preserved.

The DEIS appropriately analyzes a wide range of alternatives that vary according to “timing, mining breadth, mine location, and alternate source of aggregate.” In accordance with NEPA, the alternatives include the No Action Alternative, the full mine-out plan (100 years of mining), limiting mining in environmentally sensitive areas, shipping aggregate into Florida harbors and/or rail terminals, and mining in other locations of west-central Florida.

**EPA offers the following specific comments on relevant sections of the DEIS:**

**1. Project Purpose and Need**

EPA notes that the project will be provide a “source of affordable construction-grade limestone aggregate including aggregate that meets Florida Department of Transportation (FDOT) specifications for buildings and infrastructure to satisfy the long-term public need for high-quality aggregate” for west-central Florida. The DEIS notes that over the 5 years from 2006 to 2010, Florida produced over 430 million tons of crushed rock, with a peak annual output of 140 million tons in 2006. The DEIS also notes the demand for crushed rock is lower now than in the years leading to that peak demand in 2006, but states that “nonetheless, construction of housing units, nonresidential building space, roads and other infrastructure in west-central Florida will still result in the continued need for high-quality construction aggregate.” EPA recommends that if more recent data is available on production rates and aggregate demand, the FEIS should be updated to reflect the newer data. EPA notes that the DEIS does not identify potential use of the rock for the proposed construction of the adjacent Levy Nuclear Plant, even though large quantities of aggregate will be needed for this multi-billion dollar and multi-year construction project if it is built.

**2. Alternatives Analysis**

EPA notes that the alternatives analysis identified and evaluated a range of reasonable alternatives that would meet the stated purpose and need for the project. This analysis qualitatively screened both the offsite and onsite options that could feasibly

satisfy the need for an economical source construction grade limestone aggregate, including aggregate that meets the FDOT specifications, for buildings and infrastructure to satisfy the long-term public need for aggregate in west-central Florida. The alternatives were appropriately subjected to further evaluation to consider the impacts that each alternative would have on the human and natural environment.

The DEIS notes that higher-quality Florida limestone is primarily mined from four designated resource areas: the Lake Belt, Charlotte-Lee County, Sumter-Hernando-Citrus County, and the Taylor-Dixie-Big Bend area. The DEIS reports that the quality of Florida rock available from non-Lake Belt supply areas “has been steadily declining.” To support this assertion, EPA recommends that more information be provided in the DEIS about the rock quality trends of these non-Lake Belt areas. EPA also recommends that Table S-1. *2001–2010 Averages, Peak, and Projected Demand for Crushed Rock Based on Current and Projected Population Growth in Florida and the Tarmac Primary Market Area* be updated if the data is available.

### 3. Water Quality Issues

Analysis of potential surface water quality impacts is provided for each alternative in Chapter 4. The DEIS appropriately notes that “all of the proposed alternatives have the potential for impacts on surface waters on and off of the site.” The proposed mining activities could result in onsite impacts on intermittent streams and constructed lakes and offsite impacts in receiving watersheds, and EPA concurs with the applicant’s plan to implement construction controls with a comprehensive restoration program of disturbed areas upon completion of mining. EPA concurs with the applicant’s stated goal of minimizing the potential for adverse impacts to onsite surface waters, as well as any off site receiving waters.

EPA notes that, in accordance with NEPA, the DEIS appropriately evaluated direct and secondary impacts from construction and mining activities. EPA also notes that the DEIS considers hurricane surge impacts, which have the potential to flood the project mine site, including potential for inundation of the western half of the site during Category I and II hurricanes and potential for inundation of the entire project mine site during Category III through V hurricanes. The DEIS notes that active mining areas and remaining lakes are proposed to be protected from coastal flooding by construction of a perimeter berm with a top elevation corresponding to the projected Category III hurricane storm surge elevation and the 100-year storm surge elevation, 19 feet National Geodetic Vertical Datum. Finally, EPA notes that sea-level change impacts are evaluated in the DEIS using the US Army Corps of Engineers’ latest guidance on incorporating sea-level change into project design. The highest predicted sea-level rise of 5.7 feet results in the extreme southwestern end of the mining site being inundated after approximately 85 years of mining. Much of this potential inundation on the mining site would be in lands preserved as dedicated No-Mine Areas. The DEIS notes that mining areas in the other action alternatives would reportedly “not see inundation under any of the 100-year sea-level rise projections.”

Results of water quality monitoring at the project site and mitigation site indicate “good water quality” with respect to inorganic constituents, including metals, and gross

alpha as well as organic constituents including Benzene. The DEIS does note that low dissolved oxygen (DO) conditions occur throughout the areas sampled and reportedly reflects a regional condition. DO concentrations ranged from 0.4 to 8.6 mg/L for the data set, with 33 out of 36 samples below the FDEP Class III water quality standard for dissolved oxygen (5.0 mg/L). Existing turbidity levels are considered low reflecting good water clarity. The influence of saltwater is evident in the westernmost stations closest to the Gulf of Mexico, with slightly increased chloride, salinity, and sulfate concentrations at these locations.

EPA has proposed numeric criteria for total nitrogen and total phosphorous for Florida surface waters. Site specific values indicated in the surface water quality database indicate these expanded ranges may be exceeded at the site. At the time the DEIS was being prepared, the proposed EPA criteria had not been finalized and therefore did not constitute regulatory standards. FDEP is currently working on state standards that may differ from EPA's proposed standards and could replace them if approved by EPA. The FEIS should be updated to reflect any future approvals of nutrients criteria.

DEIS Appendix 3.16 "References" lists EPA's Section 303(d) List Fact Sheet for Watershed Waccasassa, which was accessed through EPA's Total Maximum Daily Load (TMDL) website and reviewed in preparation of the DEIS. It is unclear in the DEIS if any TMDLs have been approved for waterbodies within the proposed mining areas. If TMDLs are approved or established before the FEIS is published, the document should be updated to reflect these approvals. The FEIS should be updated for any recent TMDLs (DO, CBOD, nutrients, sediment, siltation and habitat alteration, etc.) and the most recent 303(d) (impaired waters) status of receiving/downstream waterbodies draining the mining lands.

EPA recommends that additional information/data be provided in the FEIS regarding how surface water quality could be impacted by the proposed limestone mining. For example, the FEIS could cite research (or collected data) that provides a comparable example of the expected impact on surface water quality. EPA further recommends that information be presented on the long term impacts of each alternative on surface water quality after restoration/reclamation.

#### **4. Groundwater Drawdown**

The DEIS notes that all alternatives were appropriately evaluated with detailed groundwater modeling that included an evaluation of a range of potential impacts. Minor impacts on groundwater flow have been noted across the mine site with several of the alternatives, and some have predicted increases in north-to-south seepage over pre-mining conditions ranging from 11 to 18 percent. Minor decreases in groundwater flow from east to west are reported as occurring under each of the alternatives, and the DEIS states that there are no "discernible impacts" due to mining on groundwater flow across modeled transects outside of the mine site for any of the alternatives. The maximum change in the average levels of onsite wells as a result of mining (among all of the alternatives) was a decrease of 0.3 feet under Alternatives 2, 3, and 8. The DEIS notes that the maximum decrease in water levels on site would have "minimal impact" on the drawdown of water levels off site, resulting in little to no impact on offsite wetlands.

Baseline groundwater flow east to west across the westernmost offsite modeled transect is reported in the DEIS as 89.4 million gallons per day and has shown “negligible change” in modeling under any of the alternatives. As a result of this continued positive flow, modeling results demonstrate no discernible saltwater intrusion into the groundwater.

Regarding permitting, EPA notes that the General Water Use Permit 20013273.000 has been issued by the Southwest Florida Water Management District (SWFWMD) on June 17, 2010, and that Environmental Resource Permit 44029159.001, Dragline Assembly, was approved by SWFWMD on August 16, 2007. Also, Environmental Resource Permit 4029159.000, Test Pit, was approved by SWFWMD on February 22, 2006. Finally, EPA notes that Environmental Resource Permit 0244771-002 was issued by FDEP on November 1, 2010, and Industrial Wastewater Permit FLA663492 was issued by FDEP on January 8, 2010.

## **5. Wetlands Issues**

Regarding the Alternative Mining Location Analysis, EPA understands that the COE has preliminarily determined that the King Road site contains the Least Environmentally Damaging Practicable Alternative (LEDPA) location. EPA has reviewed the onsite mining alternatives and wetlands analysis contained in the DEIS, and we have focused our review on the information depicted in Table 4-7 (pg 4-33) and Table 5-3 (pg 5-8). EPA notes that Alternatives #2 and #5 appear less desirable for selection as the LEDPA because they result in a net reduction of wetlands function as a result of onsite limestone mining (e.g., Alternative #2 results in a loss of 288 UMAM units and Alternative 5 results in a loss of 161 UMAM units). The DEIS notes that the proposed mitigation would not be sufficient to “off set” the functional loss for Alternatives #2 and #5. After examining Alternatives #3, #4, #6, #7 and #8 and reviewing Table 4-7, EPA notes that the FLUCCS code impacts (functional Hardwood wetlands = 616b + 617 + 621 + 630) clearly demonstrate the superiority of Alternative #7, as it has the least impacts to these important habitats. We note that Alternative #7 has 65 acres of hardwood wetland impacts, while Alternative #3 has 235 acres of hardwood wetland impacts, Alternative #4 has 170 acres of hardwood wetland impacts, Alternative #6 has 144 acres of hardwood wetland impacts, and Alternative #8 has 243 acres of hardwood wetland impacts.

## **6. Periodic Interagency Review of 404 Permit**

EPA notes from the DEIS that the proposed site would be mined over an approximately 100-year period. EPA’s Section 404 Project Manager recommends that any 404 permit issued should include periodic interagency reviews of mining and mitigation activities at least every 5 years, as well as periodic reporting of mining and mitigation activities on an annual or bi-annual basis to the Jacksonville District’s Regulatory Division.

## **7. Transportation Issues (Haul trucks)**

The DEIS appropriately notes that traffic increases are also expected throughout the project site and along U.S. Route 19/98, the main arterial road, east of the project site.


Based on the traffic study and the volume of truck traffic turning onto and off of U.S. Route 19 at King Road, the traffic engineering consultant (Lincks & Associates) recommended that left and right turning lanes in excess of 400 feet be established along U.S. Route 19. The FEIS should clarify if the Florida Department of Transportation (FDOT) would support the installation of these turning lanes, and note the responsible entity for financing their construction.

#### **8. Editorial Comments:**

- Recommend adding the site and mitigation “footprints” to Figure 3-4 on p. 3-8.
- Recommend providing an explanation of why the maximum sustained water table elevation in Figure 3-6 occurs from January – March. Also, recommend providing an explanation for break in data between Nov 07 and Jan 08 in same figure.
- Legends are not clear in Figures 3-17 thru 3-20.
- Figure 3-22 – It is hard to orient to North and South as referenced in the text. Suggest revising figure or text to make clearer.
- Demographics in Table 3-28 – Recommend using more detailed census data (such as census blocks if available) and not just county-level census data.
- The Census Block Groups described on p. 3-86 should be identified in the text.

We appreciate the opportunity to comment on this DEIS. Based upon our review, we have assigned this DEIS a rating of EC-2, meaning we have environmental concerns and have requested additional information for the Final EIS (FEIS). Please include us in any notifications of future interagency meetings, and please forward a copy of the FEIS when it becomes available. If you wish to discuss EPA’s comments, please contact me at 404/562-9611 (mueller.heinz@epa.gov) or Paul Gagliano, P.E., of my staff, at 404/562-9373 (gagliano.paul@epa.gov), or Dan Holliman at 404/562-9531 (holliman.daniel@epa.gov). For wetlands/Section 404 issues, please contact Eric Hughes from EPA’s Wetlands Regulatory Section at 904-232-2464 (Eric.H.Hughes@usace.army.mil).

Sincerely,



Heinz J. Mueller, Chief  
NEPA Program Office  
Office of Policy and Management

cc:

Mr. Eric Hughes, EPA Region 4 Section 404 Project Manager  
Mr. Edward Sarfert, Senior Project Manager, COE, Jacksonville District